fight to retain it beyond all reason is strong testimony to the dangers inherent in creating a governmental subsidy -- the beneficiaries of the subsidy will never willingly relinquish the subsidy.

This does not mean that U S WEST is recommending that the Commission institute some simplistic quick fix to the ESP exemption. Quite to the contrary, U S WEST recommends that the ESP exemption be dealt with as part of overall access reform. But the problem cannot be ignored indefinitely. U S WEST has submitted to the Commission by way of an exparte filing documentation of the extent of ESP usage of local exchange facilities, the impact (current and future) of such usage in light of the rapidly expanding use of the Internet, and the network difficulties which could arise if the problem is not corrected. A copy of this filing is attached hereto as Attachment B.

Respectfully submitted,

U S WEST, INC.

By:

Robert B. McKenna Richard A. Karre

Coleen M. Egan Helmreich

Suite 700

1020 19th Street, N.W.

Washington, DC 20036

(303) 672-2861

Its Attorneys

Of Counsel, Dan L. Poole

February 18, 1997





ALFRED E. KAHN
308 NORTH CAYUGA STREET
ITHACA, NEW YORK 14850
TEL: (607) 277-3007
FAX: (607) 277-1581

January 14, 1997

#### **EX PARTE**

Mr. William F. Caton Acting Secretary Federal Communications Commission 1919 M Street, N.W. - Room 222 Washington, DC 20554

Re: CC Docket No. 96-98

Dear Mr. Caton:

On Tuesday, January 14, 1997, the attached letter was sent by Fedex to each of the FCC Commissioners.

Two (2) copies of this Notice are being filed with the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Sincerely,

Martha H. Ullberg for Alfred E. Kahn

Attachment

cc: Chairman Hundt Commissioner Chong Commissioner Ness Commissioner Quello

# ALFRED E. KAHN 308 NORTH CAYUGA STREET ITHACA, NEW YORK 14850 TEL: (607) 277-3007

FAX: (607) 277-1581

January 14, 1997

The Honorable Reed E. Hundt Chairman Federal Communications Commission 1919 M Street, N.W. - Room 814 Washington, DC 20554

Dear Mr. Chairman:

I have studied the letter of December 2nd by five former Department of Justice economists declaring their support for the FCC's conclusion that charges for network elements and interconnection should be "based on total element long run incremental cost (TELRIC)." Aside from their unexceptionable statement of the general principle that "prices based on forward-looking costs give the right signals to both producers and customers to ensure the efficient use of resources," I find myself in fundamental disagreement with them, for the following reasons.

I. Which TELRIC—blank slate or actual? The declaration is totally silent on the issue—intensely contested at both the Federal Communications Commission and in arbitrations all over the country—of whether the "basis" for these charges that they endorse is to be the (estimated) incremental costs that will actually be incurred by the LECs or, instead, the estimated costs of a hypothetical, completely new network, employing the most efficient current technology and constructed from the ground up. Since AT&T, the sponsor of their statement, and the FCC have each supported versions of the latter, "blank slate" version of TELRIC and the authors write in explicit support of the FCC's position, their intention is, presumably, to support that version, even though they nowhere explicitly do so. And they nowhere explicitly defend that version against the criticisms from a number of sources.

The general economic principle that they cite clearly requires, however, that the correct pricing "signals" inform consumers of the costs that society will actually incur if they take somewhat (or a lot) more of each good or service—or that society will save if they take less. These can only be the actual incremental costs of the incumbent companies.

Advocates of the "blank slate" version of TELRIC typically assume that that is the level to which competition would drive prices, if it were effective. They are mistaken. In a world of

continuous technological progress, it would be irrational for firms constantly to update their facilities in order completely to incorporate today's lowest-cost technology, as though starting from scratch: investments made today, totally embodying today's most modern technology, would instantaneously be outdated tomorrow and, in consequence, never earn a return sufficient to justify the investments in the first place. For this reason, as Professor William J. Fellner pointed out many years ago, firms even in competitive industries would systematically practice what he calls "anticipatory retardation," adopting the most modern technology only when the progressively declining real costs had fallen sufficiently below currently prevailing prices as to offer them a reasonable expectation of earning a return on those investments over their entire economic life. In consequence, even perfectly competitive prices would not be set at the level of these (totally) current costs.

The Commission justifies this same version of cost on the ground that the actual costs of the incumbent companies may reflect inefficiencies of their present operations, which clearly suggests it expects the costs of its preferred version would be lower than actual costs. The LECs' objection to that version clearly reflects the same understanding. And in point of fact, the results of Hatfield models presented typically by the IXCs in arbitration proceedings do generally run much lower than the LECs' estimates of their own incremental costs.

In either event, the Commission's prescription reflects a presumption all too typical of regulators—declaring, in effect, "we will determine not what your costs are but what they ought to be." That approach has two major defects: first, that is not how the competitive process works; and second, its prices would actually discourage competitors coming in and building their own facilities when that would be more efficient than using the incumbent's facilities—which it was the clear intention of the new Act to encourage.

In unregulated markets, prices tend to be set on the basis of the actual costs of incumbent firms. That gives challengers the proper target at which to shoot, the proper standard to meet or beat and the proper reward if they succeed. If they can achieve costs lower than that, they will enter and in the process (which the FCC's pricing rules would short circuit) beat prices down to efficient levels. Ultimately, only the market, and not regulators, can determine the efficient result.

II. The ignored question of required markups above incremental costs. The FCC recognized that rates set at bare incremental costs would not produce enough revenue for companies to recover even their total forward-looking costs, let alone the costs that they have incurred historically and not yet fully recovered, along with the revenue deficiencies created by the underpricing of basic residential service. The critical issues therefore revolve around the markups above incremental costs that may be incorporated in these charges to competitors—in compliance with the Act's provision entitling the LECs to an opportunity to a "reasonable profit." The clear intention of the insistence by the five economists that prices be based exclusively on forward-looking costs is, of course, to foreclose a markup above incremental costs in order to permit recovery of any portion of the huge sunk costs that the incumbent LECs

have incurred in constructing their ubiquitous networks. Only prices based exclusively on forward-looking costs would be, as they put it, "fair" and "reasonable."

It is not clear what qualifications they have for defining that "fairness" and "reasonableness." The FCC is dealing here with companies that have for scores of years been regulated as public utilities, and continue to be. Fairness and reasonableness can logically be defined only in terms of the context of that historical and continuing regulation; it should not be based solely on the general economic principle they cite.

Over the decades, regulators have made all sorts of promises to the utility companies, as a means of holding down prices. For example, when new subscribers were hooked up to receive service, the major part of the (non-recurring) costs were not charged to them but capitalized—with a promise of return on and of the undepreciated balance over the future. And regulators of telephone companies have substantially underpriced basic local exchange service, permitting the companies to make up the discrepancy by correspondingly overpricing discretionary "vertical" services and toll services, and after the AT&T divestiture correspondingly set access charges to the long-distance carriers at levels designed to continue the requisite subsidy flow.

By the standards under which I as a regulator was constrained to live, "fair and reasonable" rates were ones that gave the companies a reasonable opportunity to recover those actually incurred costs, including the costs of underpriced basic residential dial tone.

That history has an additional implication for the attempt of the FCC, with the approval of these economists, to dictate a basis for the setting of these rates that excludes recovery of those costs. In all of the regulatory practices that I have described—and especially in the underpricing of residential dial tone—there have been wide variations from state to state and from region to region within states. There is simply no way a Federal agency can determine the extent of those individual obligations or reach equitable settlements, company by company, in the transition to full competition.

III. The prerequisites of innovation. While stressing the dynamic changes in telecommunications and the importance of a favorable climate for innovation, the five economists support a specific prescription for pricing network elements and services that is entirely static. Any proposal that rates be set at costs, or cost plus regulatorily-prescribed markups, should at least, in consideration of the importance of encouraging innovation, distinguish the rules applicable to providing existing network elements from the rules that would apply for supplying innovative new ones. To tie the rates for new services closely to costs, incremental or otherwise, would fatally attenuate the incentives of both incumbents to develop new and innovative service and of competitors to enter on a facilities basis. The rule that these economists support for the pricing of network elements, along with the FCC's pricing rules for services purchased for resale, clearly discourage that most creative form of competition.

The historical institution of tightly regulated, franchised monopolies lacked competitive stimuli to innovation. But in offering those monopolists reasonable assurances that they would be permitted to recover their total prudently incurred investment costs—of unsuccessful as well as successful ventures—it did have a positive effect on their willingness and ability to innovate. As we have moved from cost-plus regulation to a competitive system, however, any requirement that charges to competitors for innovative new network elements be closely tied to some narrow measure of cost would destroy that previous symmetry. Rival entrants would then have the option of purchasing the results of successful innovation at bare cost, while leaving stranded the costs of unsuccessful ventures. The system would be one in which investors would be forced to absorb the costs of failed ventures—as in competitive markets generally—but be denied the offsetting opportunity, essential to innovation in a competitive system, to reap whatever rewards the unregulated market will provide for the ventures that turn out successfully.

In short, TELRIC—whether the actual or the hypothetical, blank-slate version—is the wrong pricing standard to use for a competitive industry, from the vital standpoint of encouraging innovation. Presumably, the IXCs and their economists agree, since they simultaneously have asserted that the long distance business is fully competitive and that it is reasonable for them to charge rates several times their own incremental costs.

- IV. The prerequisites of efficient competition. Finally, there is the clear implication in the letter (see pars. 4 and 5) that charges based on actual LEC costs, and particularly if they incorporate markups to recover any portion of historical costs, would be "anti-competitive"—which can only mean that they would deny equally efficient rivals an opportunity to compete with the incumbents. This contention is surprising for three reasons:
- 1. One of the authors is a founding father of the efficient component pricing rule, the essence of which is that so long as the charges by incumbents to competitors for use of their essential facilities are fully reflected in (or "imputed" to) the incumbents' own retail charges, efficient competition is in no way jeopardized—provided those retail charges of the LECs fully recover their own LRICs as well. Of course, application of this rule does not apply where retail prices are set below costs to meet regulatory requirements.
- 2. In any event, presumably all of these economists know about the historic antitrust case in which the Aluminum Company of America was found guilty of imposing an illegal squeeze on competing fabricators. The Court made this finding not on the basis of the absolute level of Alcoa's charges for ingot—the essential input in that case—but on the margin between that ingot price and Alcoa's own charges for the fabricated products: it was the failure of that margin to recover Alcoa's incremental fabricating costs that was the basis for its condemnation. Nowhere does the Alcoa doctrine even remotely imply that the height of the ingot charge itself had any relevance to the charge of monopolization.
- 3. The 1996 Act itself recognizes this principle. It requires Bell companies that have been authorized to provide in-region long distance services to charge their own long

distance operations the same rates for exchange access that they charge to others. This simple measure ensures that the absolute level of exchange access rates will not influence the competitive outcome.

What we need, therefore, are the Act's instructions to the states to open their systems to competition, removing all barriers to entry and giving competitors access to essential facilities, at rates set at "just and reasonable" levels—which means incorporating in those rates whatever portion of the actual costs of the companies and whatever markups their respective traditional regulatory practices justify—at the same time requiring compliance by the LECs with the Alcoa rule.

Sincerely,

Med Labertalen Alfred E. Kahn

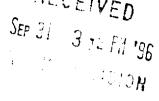
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cc: Commissioner Chong Commissioner Ness Commissioner Quello ATTACHMENT B

U S WEST, Inc. Suite 700 1020 Nineteenth Street, NW Washington, DC 20036 202 429-3133

RECEIVED

Glenn Brown Executive Director-Public Policy



October 1, 1996

Mr. James Schlichting, Chief Common Carrier Bureau 1919 M Street N.W., Room 544 Washington, D.C. 20554

Dear Mr. Schlichting:

Attached for your information and use are the final results of a study undertaken by U S WEST to analyze network usage patterns of Enhanced Service Providers (ESPs). We provided preliminary results to you on June 28, 1996.

Please contact me if you would like to discuss this further.

HBrown

Sincerely,

Attachments

## U S WEST Communications ESP Network Study - Final Results

Introduction

U S WEST has completed network usage studies of a sample set of Enhanced Service Providers (ESPs). Preliminary results were documented on June 28, 1996. These studies were undertaken to validate our concerns that ESPs, particularly Internet Service Providers, have unique usage patterns that impact our local network.

Study Sample

U S WEST has identified 98,300 ESP lines within our 14 state territory. Due to the "ESP exemption," they currently purchase local services, which are not uniquely identified as ESP services in any of our systems. Attachment 1 provides further detail about this estimated ESP "universe" on which our sample was based.

We then selected a robust sample of ESPs for the study in four states: Colorado, South Dakota, Utah, and Washington. The sample included 64 hunt groups, with 6,073 lines. The sampled lines represent approximately 6% of our total estimated ESP lines in service. The sample was subdivided into Internet Service Providers (ISP), Value Added Networks (VAN), On Line Providers (OLP), and Bulletin Board Services (BBS). Further detail about the selected sample can be found in Attachment 2.

Each ESP line was studied 24 hours a day, 7 days a week, for a 4 week period. Two types of network usage studies were undertaken: 1) Traffic Data Report Service (TDRS) reports, and 2) Subscriber Line Usage Studies (SLUS). The studies began in February 1996 and concluded in August 1996.

#### Final Study Results

The final results of our network usage studies are summarized here. The results clearly demonstrate that ESPs use the local network in a manner that is significantly different than other users.

- 1. Attachment 3 displays comparisons of the average minutes per line and average terminating attempts per line for each type of ESP and the central office. These are displayed for both the central office busy hour and the ESP hunt group busy hour. As the charts in Attachment 3 demonstrate, the ESPs use their lines up to six times more than other users during the office busy hour, and up to eight times more than other users during their hunt group busy hour.
- 2. The average holding times per call for the studied ESP types as well as other residence and business users are displayed in Attachment 4. The average holding time per call for ISPs, VANs, and OLPs is three to eight times longer than typical local users.
- 3. A comparison of the busy hour for the central office and the ESP hunt groups is displayed in Attachment 5. The busy hour for ESPs is most frequently at 10 p.m., with 62% of their busy hours falling between 7 p.m. and 12 a.m. In contrast, the central office busy hour is most frequently at 4 p.m., with only 10% of them falling between 7 p.m. and 12 a.m. Continued ESP growth of this nature will drive network reengineering to accommodate evening busy hour usage.
- 4. Attachment 6 compares the average ESP usage per line (over 24 hour period based on the 4 week sample) with the average IXC usage per circuit (over a 15 hour period based on a 1 week sample). The ESPs keep their lines consistently busy, from 20 to 45 minutes out of every hour. IXCs, for comparison, also maintain high usage on their circuits, from 10 to 40 minutes during each hour studied. The IXC usage per circuit, however, is not as consistently busy as ESP lines. IXCs pay access charges for usage; ESPs pay no usage charges.

October 1, 1996 Page 1

#### U S WEST Communications ESP Network Study - Final Results

- 5. A comparison of the studied ESPs to a sample of residence and business customers is displayed in Attachments 7 and 8. The residence and business customer sample is based on the most current annual Subscriber Line Usage Studies (SLUS) for Utah and South Dakota...
  - Attachment 7 compares actual usage across a 24 hour time period. The ESPs have consistently longer calls than typical residence and business users across all times of the day. During the peak hours for ESPs (10 p.m. to 5 a.m.), the ESP calls were up to 14 times longer than business users and 5 times longer than residence users. During the business day, the ESP calls were up to 5 times longer than business users and 3 times longer than residence users.
  - Attachment 8 displays a distribution of actual call lengths in Utah:
    - -- over 40% of ESP calls are longer than 5 minutes, while only 16% of residence calls are longer than 5 minutes and only 8% of business calls are longer than 5 minutes.
    - -- 10% of ESP calls are longer than 45 minutes, while virtually all of business and residence calls are completed within 30 minutes.

**Projections** 

Based on the study results, we have completed a <u>conservative</u> 5 year projection of ESP usage and lines. Attachment 9 illustrates this forecast by ESP type. By 2001, we expect ESP lines to grow to 1.3% of our total lines, while ESP usage on those lines increases to 8.96% of total minutes.

#### Network Costs

We have also developed an estimate of the additional *incremental* costs associated with ESP usage, based on the results of the network usage studies. Attachment 10 displays the incremental cost per line associated with BBS, ISP, OLP, VAN and typical business customers. The incremental usage costs for ISPs are <u>eight times</u> that of a business line. These estimates do not represent the total additional *investment* that may be required to serve a particular ESP; such as, dedicated line unit, excess construction charges, etc.

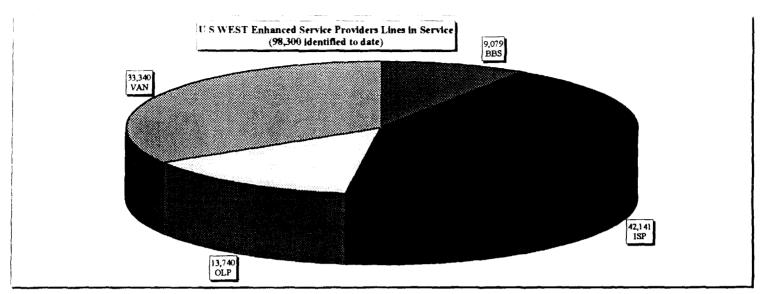
#### Conclusion

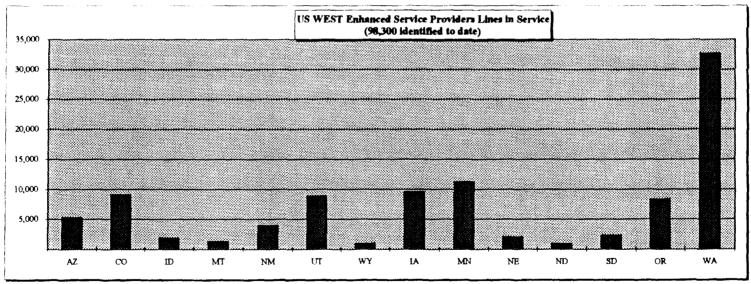
U S WEST's studies demonstrated that the usage patterns of the ESPs differ from other end users on the Public Switched Network. The explosive use of the Internet has impacted our local network and will continue to require additional investment to prevent serious blockage.

U S WEST believes that it is time for the FCC to address the implicit subsidy and inconsistency in the application of access charges inherent in the "temporary" ESP Exemption. We believe that the FCC should address this in its Access Reform proceeding. It is also U S WEST's belief that usage sensitive charges for ESPs need to be established in order to send rationale pricing signals for their use of the Public Switched Network.

October 1, 1996 Page 2

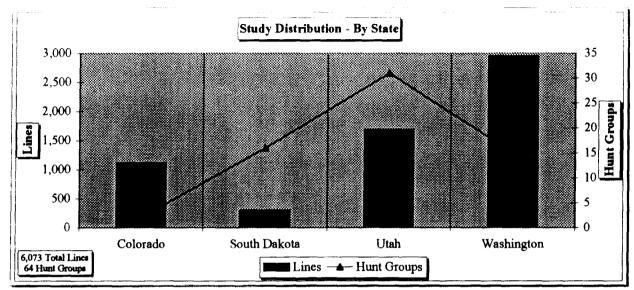
Atta = 2nt #1 ESP Network Study - Final Results



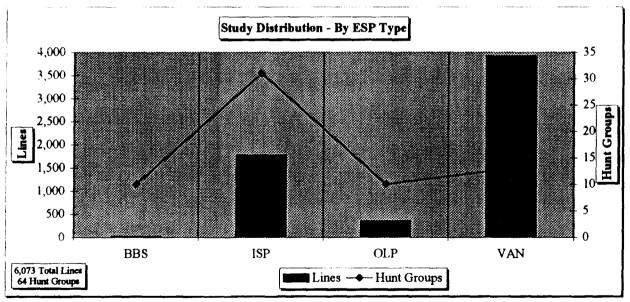


Key: BBS - Bulletin Board Service ISP - Internet Service Provider OLP - On Line Provider VAN - Value Added Network

Art ...ent #2
ESP Network Study - Final Results



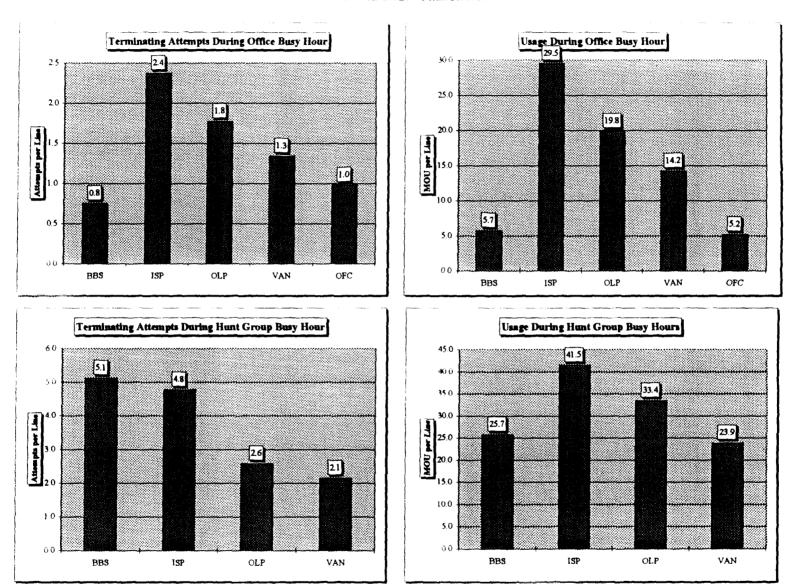
Distribution by State	
Lines	Hunt Groups
1,122	2
303	16
1,695	31
2,953	15
6,073	64
	1,122 303 1,695 2,953



#### Distribution by ESP Type Lines Hunt Groups BBS 10 22 ISP 1,776 31 OLP 352 10 VAN 13 3,923 Total 6,073 64

Key: BBS - Bulletin Board Service ISP - Internet Service Provider OLP - On Line Provider VAN - Value Added Network

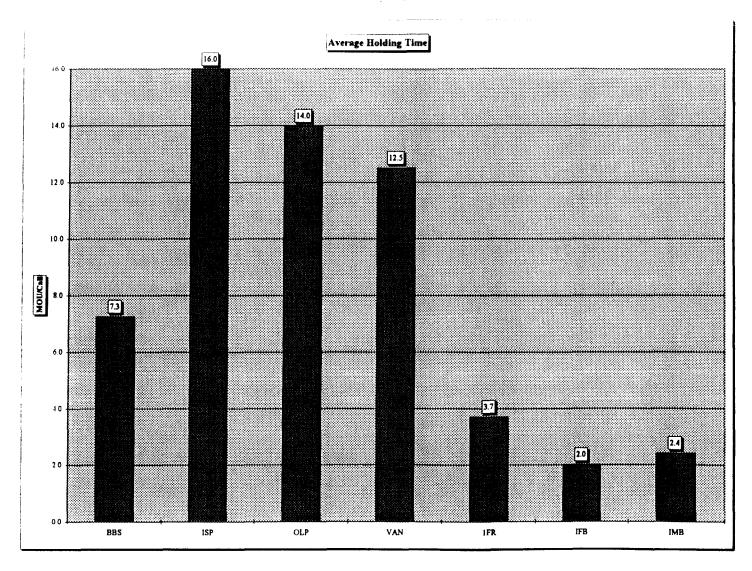
Atta ent #3
ESP Network Study - Final Results



Key: BBS - Bulletin Board Service ISP - Internet Service Provider OLP - On Line Provider VAN - Value Added Network

U.S. WEST Communications

Att ent #4
ESP Network Study - Final Results



Key: BBS - Bulletin Board Service

ISP - Internet Service Provider

OLP - On Line Provider

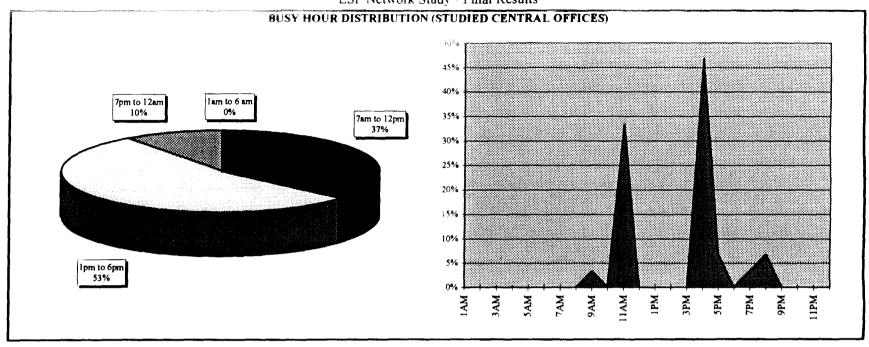
VAN - Value Added Network

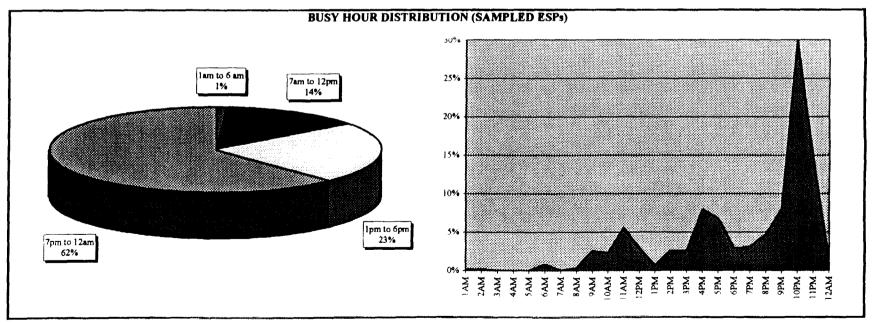
1FR - Flat Rated Residential Line

1FB - Flat Rated Business Line

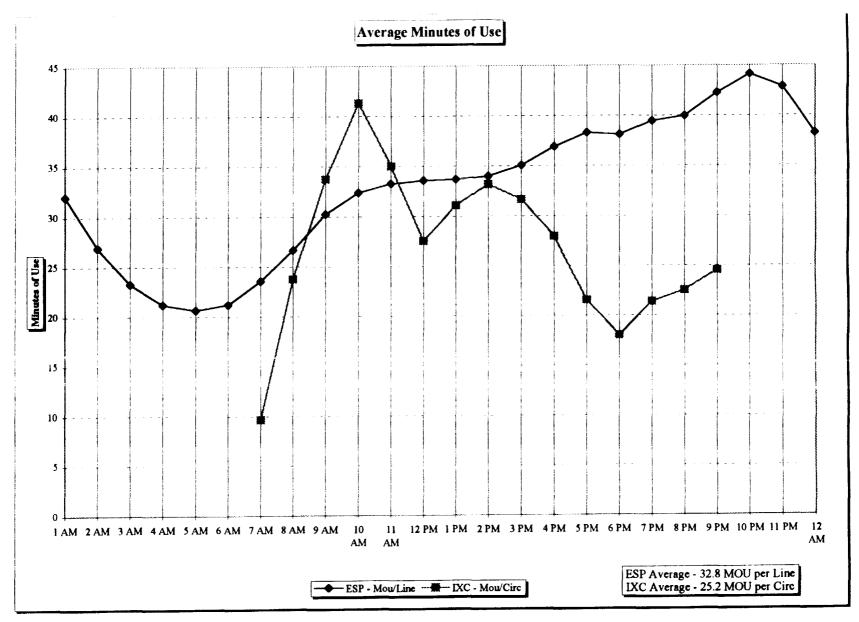
1MB - Measured Business Line

Atta ent #5
ESP Network Study - Final Results



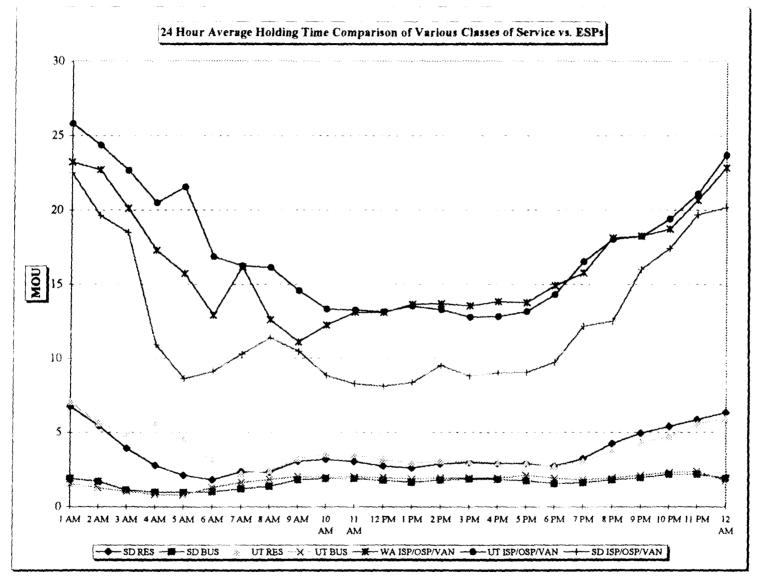


Atta .ent #6
ESP Network Study - Final Results



ESP Data - 3,378 Lines for 4 Weeks IXC Data - 4,704 Circuits for 7 Days

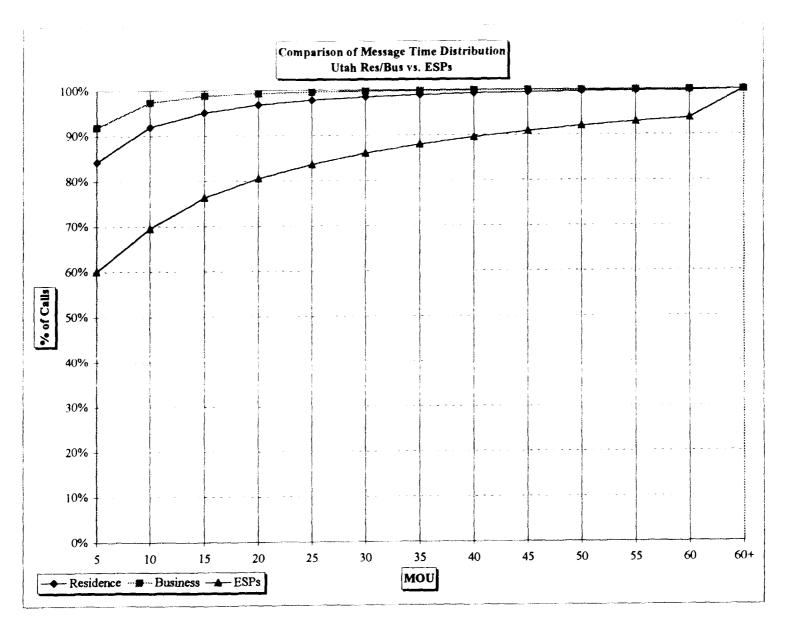
Att ent #7
ESP Network Study - Final Results



State specific results - SLUS (Subscriber Line Usage Studies) of over 78,000 residence and business lines in South Dakota and Utah totaling 24.4 million calls; Jan-Dec 1995 ann ESP results - SLUS (Subscriber Line Usage Studies) of over 2,100 ESP lines in Washington, South Dakota and Utah totaling almost 2 million calls; July 1996 sample study.

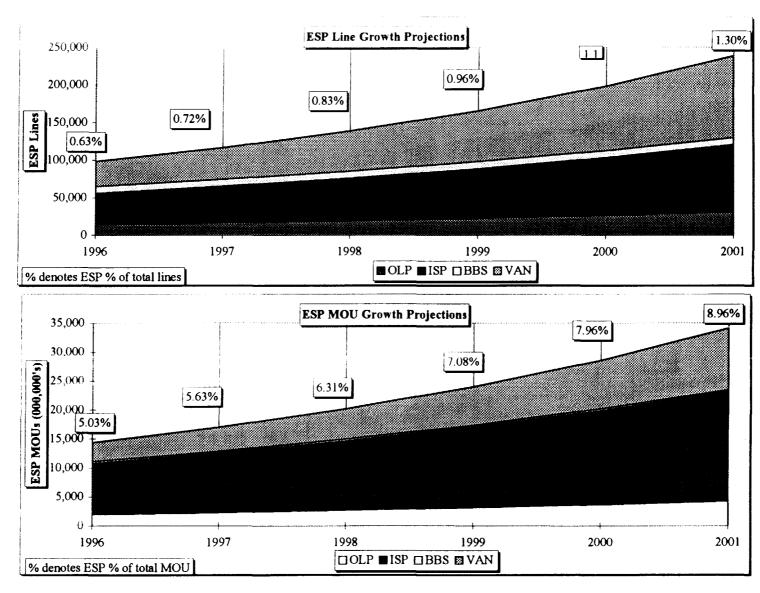
Key: 1SP - Internet Service Provider OLP - On Line Provider VAN - Value Added Network

Att. ...ent #8
FSP Network Study - Final Results



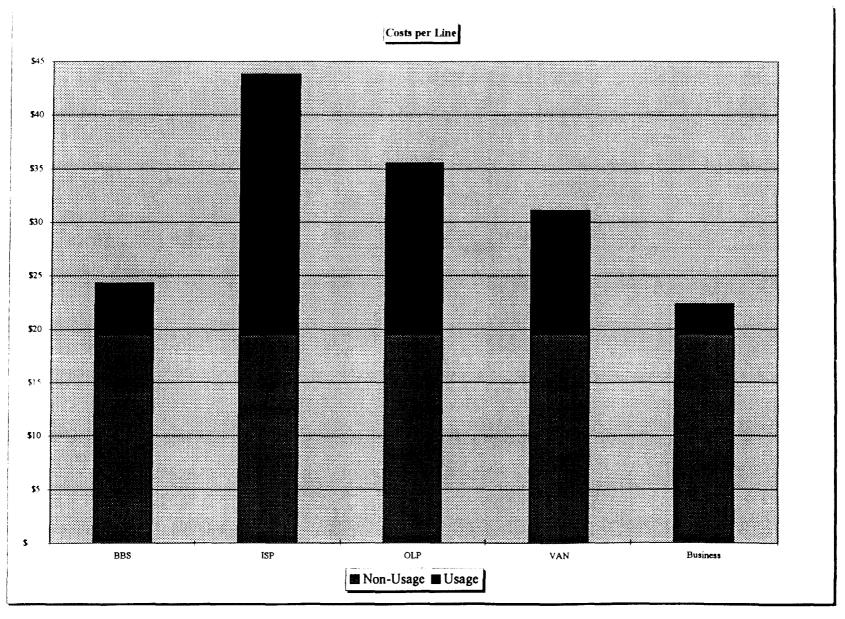
State specific results - SLUS (Subscriber Line Usage Studies) of almost 43,000 residence and business lines in Utah totaling over 17 million calls; Jan-Dec 1995 annual study. ESP results - SLUS (Subscriber Line Usage Studies) of 1,600 ESP lines in Utah totaling over 1.5 million calls; July 1996 sample study.

Att. ent #9
ESP Network Study - Final Results



Key: BBS - Bulletin Board Service ISP - Internet Service Provider OLP - On Line Provider VAN - Value Added Network

Annual Growth Rates = BBS - 0%, ISP - 16.4%, OLP - 17.4%, VAN - 26.7%



Usage Costs for the studied lines were calculated using TELRIC + Common switching and transport costs for each terminating attempt plus per MOU switching and transport costs.

TELRIC + Common switching and transport costs vary by state - for the purposes of this comparison a weighted average unit cost was developed and applied to the study results.

### CERTIFICATE OF SERVICE

I, Kelseau Powe, Jr., do hereby certify that on this 18<sup>th</sup> day of February,
1997, I have caused a copy of the foregoing REQUEST FOR ACCEPTANCE OF
LATE-FILED PLEADING and REPLY COMMENTS OF

U S WEST, INC. to be served via first-class United States Mail\*, postage prepaid, upon the persons listed on the attached service list.\*\*

Kelseau Powe, Jr

Via Hand-Delivery

As required by the December 24, 1996 NPRM (FCC 96-488), the 3 x 5 inch diskette is filed with the Office of the Secretary of the FCC, along with the hard-copies.

\*James H. Quello Federal Communications Commission Room 802 1919 M Street, N.W. Washington, DC 20554 \*Reed E. Hundt Federal Communications Commission Room 814 1919 M Street. N.W. Washington, DC 20554

\*Susan P. Ness Federal Communications Commission Room 832 1919 M Street, N.W. Washington, DC 20554

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\*Regina M. Keeney Federal Communications Commission Room 832 1919 M Street, N.W. Washington, DC 20554 \*James D. Schlichting Federal Communications Commission Room 518 1919 M Street, N.W. Washington, DC 20554

\*Competitive Pricing Commission Federal Communications Commission Room 518 1919 M Street, N.W. Washington, DC 20554 \*Rich Lerner Federal Communications Commission Room 518 1919 M Street, N.W. Washington, DC 20554

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Margot Smiley Humphrey

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TDS

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